#### § 147.1155

shall establish such a maximum pressure after notice, opportunity for comment, and opportunity for a public hearing, according to the provisions of part 124, subpart A of this chapter, and will inform owners and operators in writing of the applicable maximum pressure; or

- (ii) May inject at pressures greater than those specified in paragraph (a)(1)(i) of this section for the field or formation in which he is operating provided he submits a request in writing to the Regional Administrator, and demonstrates to the satisfaction of the Regonal Administrator that such injection pressure will not violate the requirement of §144.28(f)(3)(ii) (A) and (B). The Regional Administrator may grant such a request after notice, opportunity for comment, and opportunity for a public hearing, according to the provisions of part 124, subpart A of this chapter.
- (2) Prior to such time as the Regional Administrator establishes field rules for maximum injection pressure based on data provided pursuant to paragraph (a)(2)(ii) of this section the owner or operator shall:
- (i) Limit injection pressure to a value which will not exceed the operating requirements of §144.28(f)(3)(ii); and
- (ii) Submit data acceptable to the Regional Administrator which defines the fracture pressure of the formation in which injection is taking place. A single test may be submitted on behalf of two or more operators conducting operations in the same formation, if the Regional Administrator approves such submission. The data shall be submitted to the Regional Administrator within 1 year following the effective date of this program.
- (b) Casing and cementing. Where the Regional Administrator determines that the owner or operator of an existing enhanced recovery or hydrocarbon storage will may not be in compliance with the requirements of §§144.28(e) and 146.22, the owner or operator shall comply with paragraphs (b) (1) through (4) of this section, when required by the regional Administrator:
  - (1) Protect USDWs by:
- (i) Cementing surface casing by recirculating the cement to the surface

from a point 50 feet below the lower-most USDW; or

- (ii) Isolating all USDWs by placing cement between the outermost casing and the well bore; and
- (2) Isolate any injection zones by placing sufficient cement to fill the calculated space between the casing and the well bore to a point 250 feet above the injection zone; and
  - (3) Use cement:
- (i) Of sufficient quantity and quality to withstand the maximum operating pressure;
- (ii) Which is resistant to deterioration from formation and injection fluids; and
- (iii) In a quantity no less than 120% of the calculated volume necessary to cement off a zone.
- (4) The Regional Administrator may specify other requirements in addition to or in lieu of the requirements set forth in paragraphs (b) (1) through (3) of this section, as needed to protect USDWs.

## §147.1155 Requirements for all wells.

- (a) Area of review. Notwithstanding the alternatives presented in §146.6 of this chapter, the area of review for Class II wells shall be a fixed radius as described in §146.6(b) of this chapter.
- (b) *Tubing and packer*. The owner or operator of an injection well injecting salt water for disposal shall inject through tubing and packer. The owner of an existing well must comply with this requirement within one year of the effective date of this program.

### Supbart Y—Minnesota

# § 147.1200 State-administered program. [Reserved]

## §147.1201 EPA-administered program.

(a) *Contents.* The UIC program for the State of Minnesota is administered by EPA. This program consists of the UIC program requirements of 40 CFR parts 124, 144, 146, 148, and any additional requirements set forth in the remainder of this subpart. Injection well owners and operators, and EPA shall comply with these requirements.